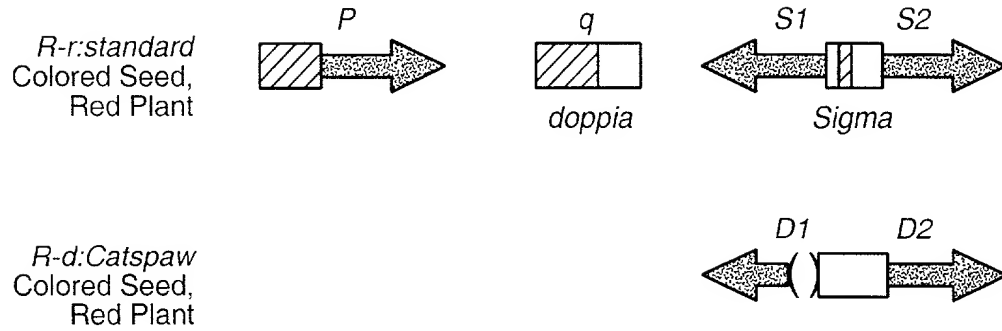
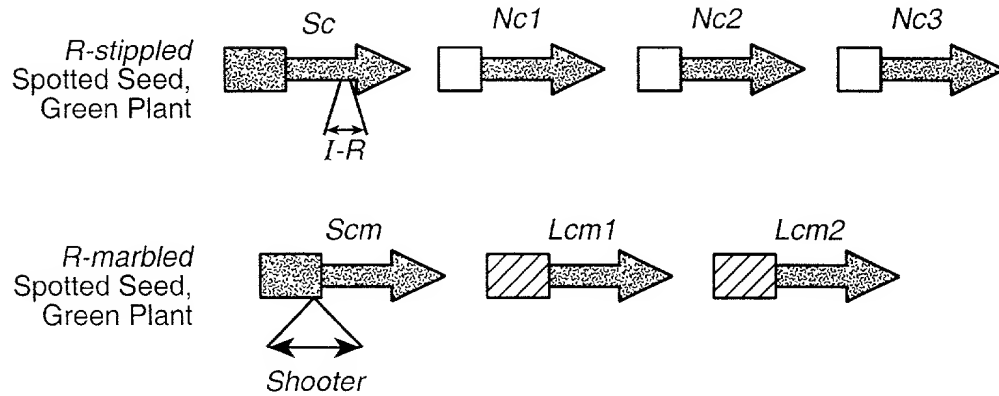


**FIG. 1B**

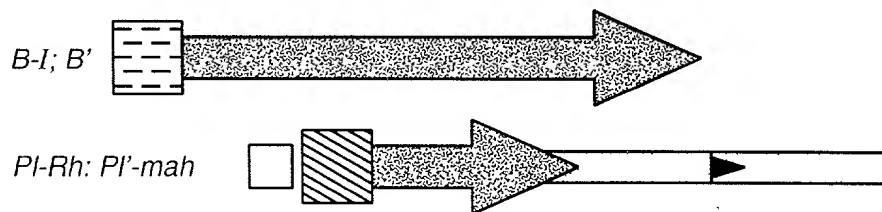
**Paramutable**



**Paramutagenic**



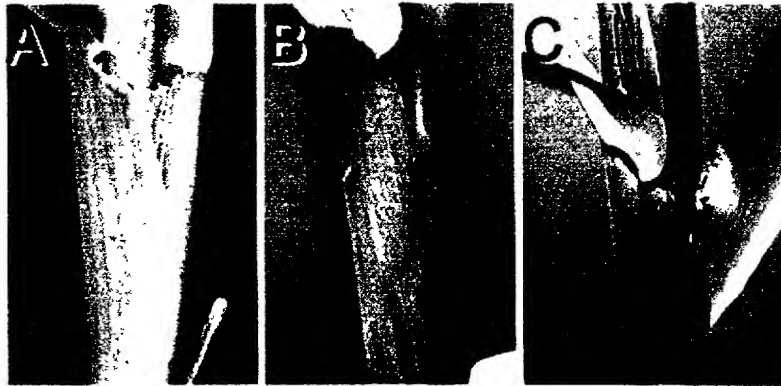
**FIG.\_2A**



**FIG.\_2B**

**FIG.\_3A FIG.\_3B FIG.\_3C**

*B'* Mop1 / mop1-1    *B'* mop1-1 / mop1-1    *B-I* Mop1 / Mop1

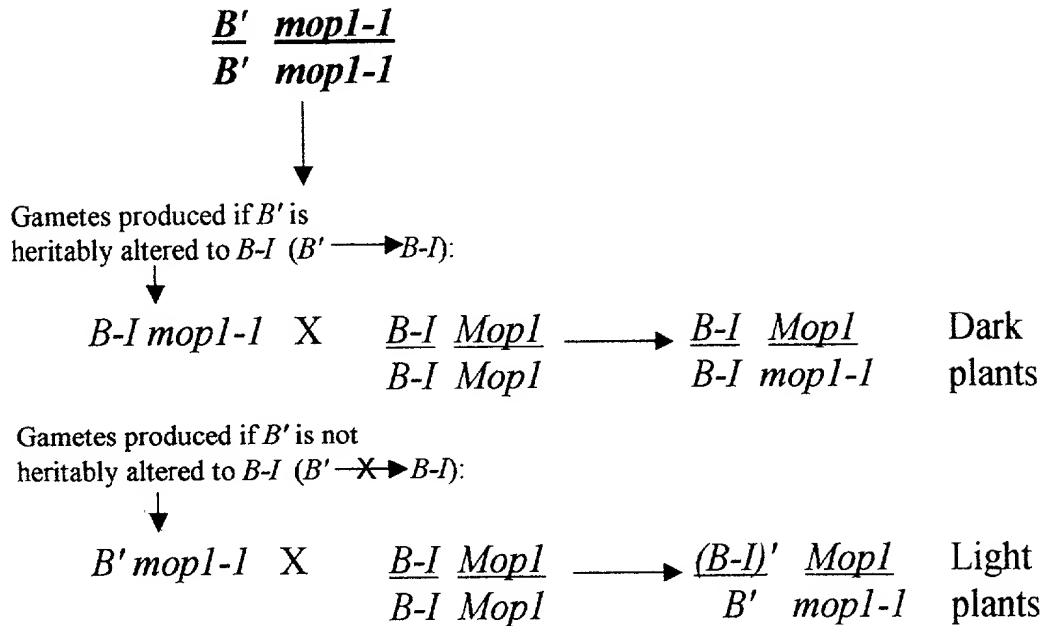


*B'* Sectors in a  
*B'* mop1-1 Plant

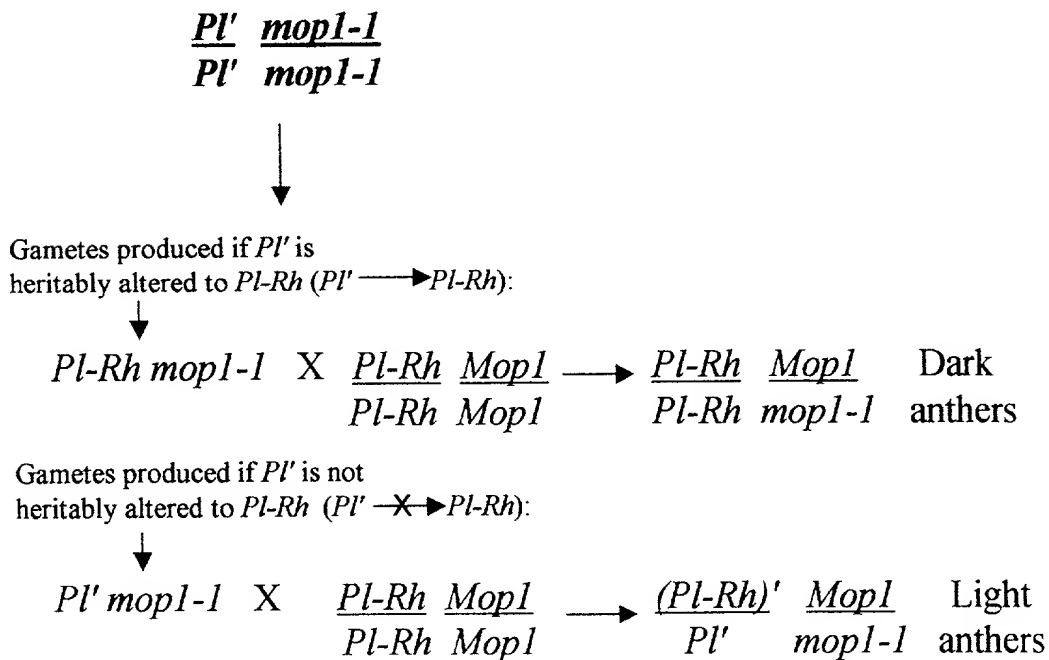
*Pl'* Mop1 / -

*Pl'* mop1-1 / mop1-1

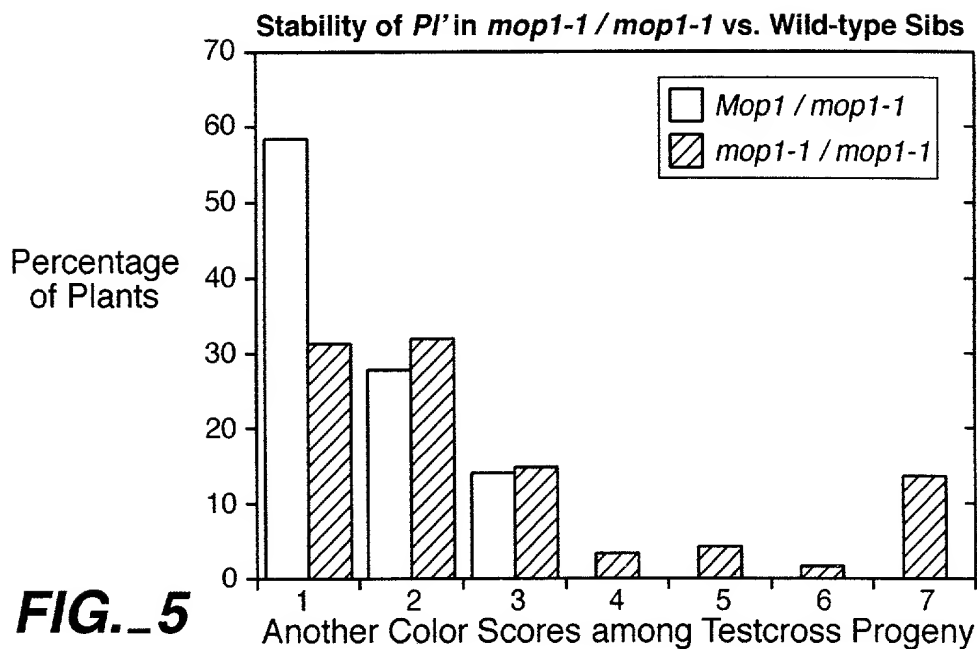
**FIG.\_3D FIG.\_3E FIG.\_3F**



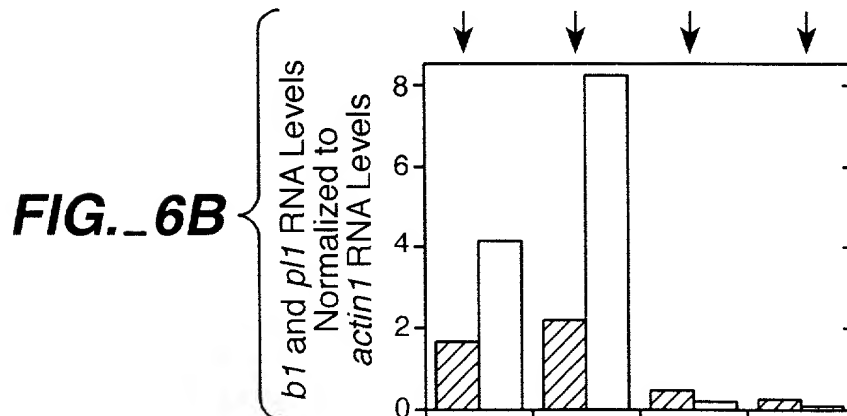
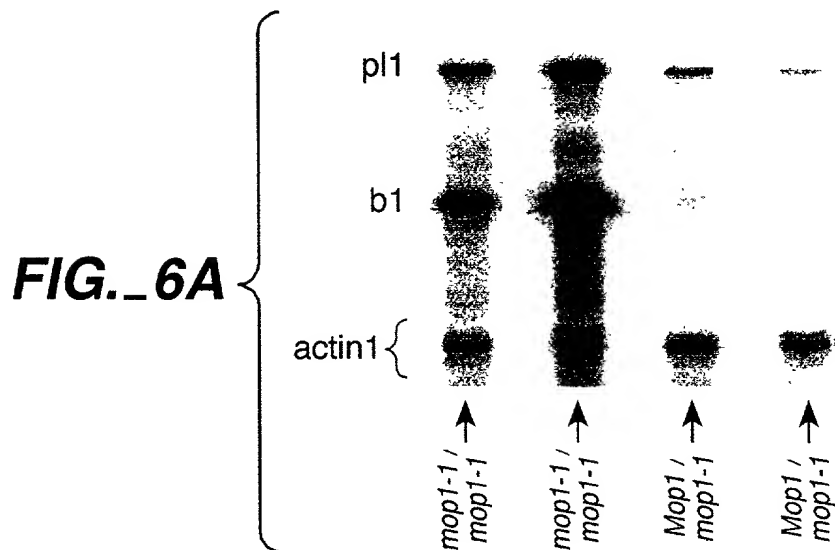
**FIG. 4A**

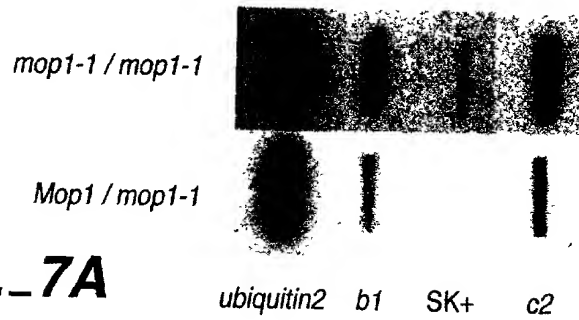


**FIG. 4B**

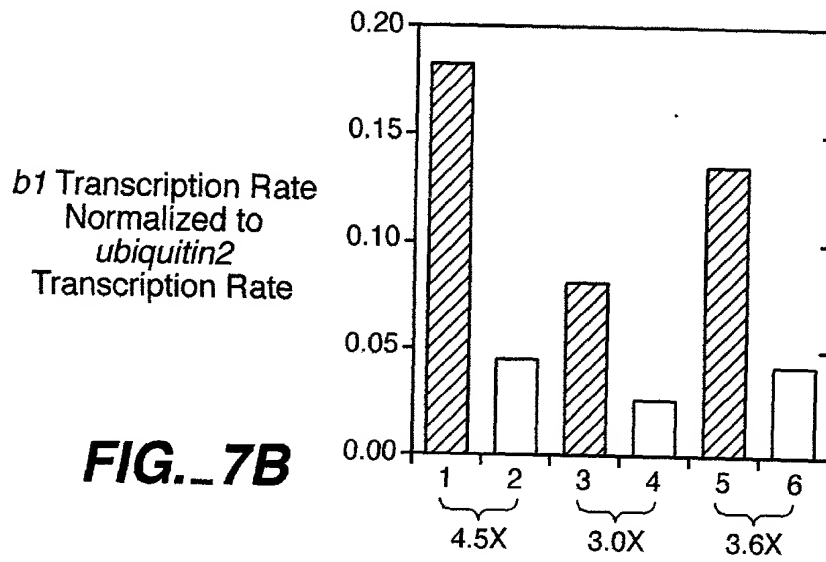


**FIG.\_5**

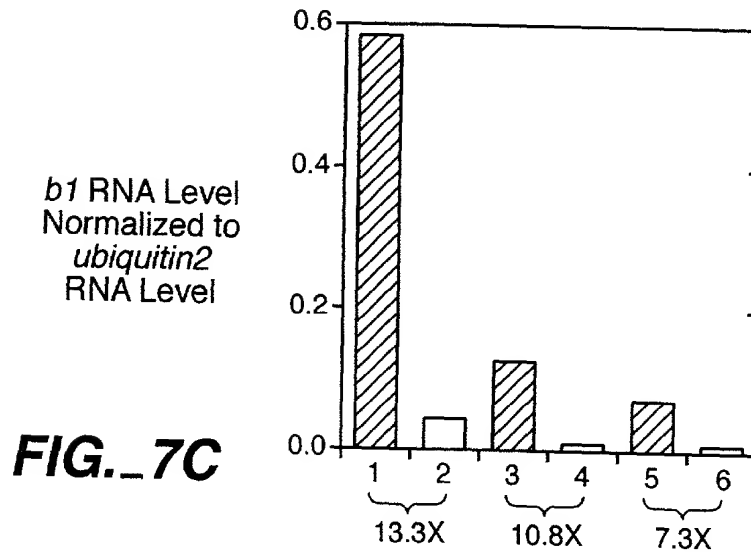




**FIG.\_7A**



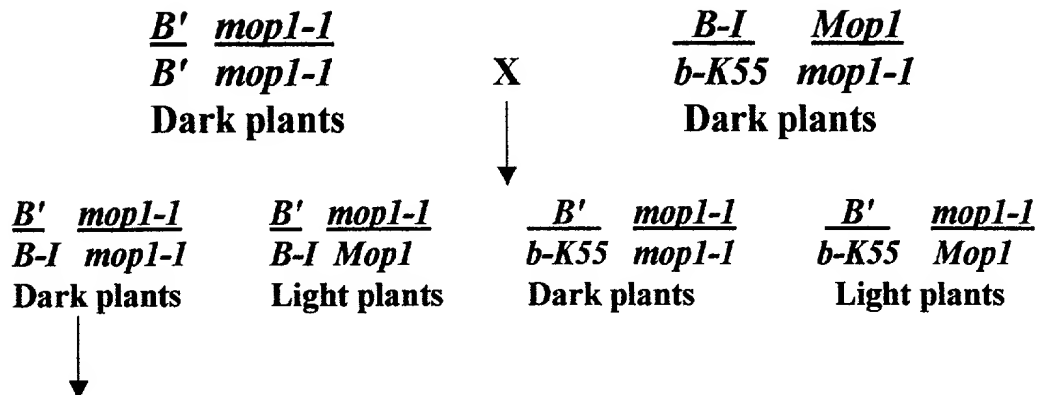
**FIG.\_7B**



**FIG.\_7C**







Testcross (by *B-Peru/B-I Mop1/Mop1* tester—diagram shows only *B-Peru* gametes of tester)

Gametes produced if paramutation  
 is prevented ( $B-I \nrightarrow B'$ ):

50%  $B' mop1-1$  X *B-Peru Mop1*  $\rightarrow$   $\frac{B'}{B-Peru} \frac{mop1-1}{Mop1}$  Light plants

50%  $B-I mop1-1$  X *B-Peru Mop1*  $\rightarrow$   $\frac{B-I}{B-Peru} \frac{mop1-1}{Mop1}$  Dark plants

Gametes produced if paramutation  
 occurred ( $B-I \rightarrow B'$ ):

100%  $B' mop1-1$  X *B-Peru Mop1*  $\rightarrow$   $\frac{B'}{B-Peru} \frac{mop1-1}{Mop1}$  Light plants

FIG. 9

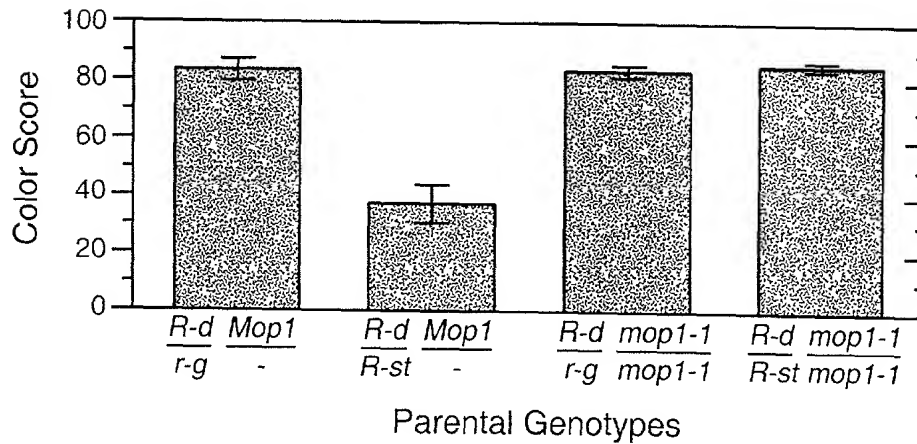
$$\begin{array}{cccc}
 \underline{R-st} & \underline{B-bar} & \underline{pl-sr} & \underline{Mop1} \\
 r-g & B' & Pl' & mop1-1
 \end{array}
 \times
 \begin{array}{cccc}
 \underline{R-d} & \underline{B-bar} & \underline{pl-sr} & \underline{Mop1} \\
 r-g & B' & Pl' & mop1-1
 \end{array}$$

↓

Four genotypes of interest among  $R-d/-$   $Pl'/-$  progeny:

$\frac{3}{16}$	$\underline{R-d}$	$\underline{Mop1}$	Light plant
	$r-g$	-	
$\frac{3}{16}$	$\underline{R-d}$	$\underline{Mop1}$	Light plant
	$R-st$	-	
$\frac{1}{16}$	$\underline{R-d}$	$\underline{mop1-1}$	Dark plant
	$r-g$	$mop1-1$	
$\frac{1}{16}$	$\underline{R-d}$	$\underline{mop1-1}$	Dark plant
	$R-st$	$mop1-1$	

**FIG. 10A**



**FIG. 10B**

**FIG.\_11A**



**FIG.\_11B**



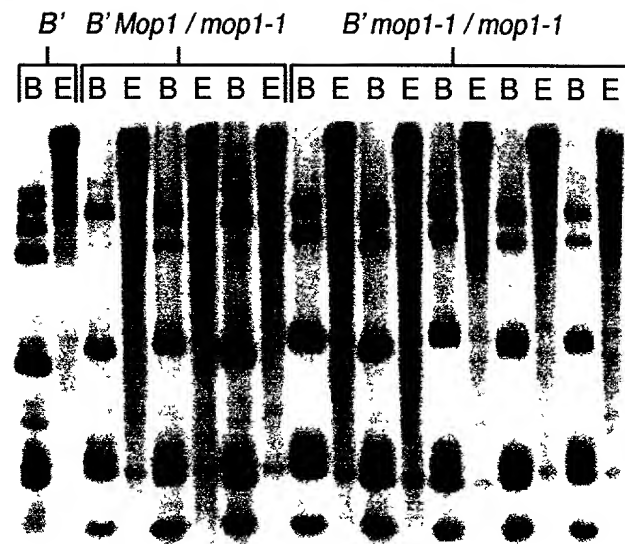
**FIG.\_11C**



**FIG.\_11D**



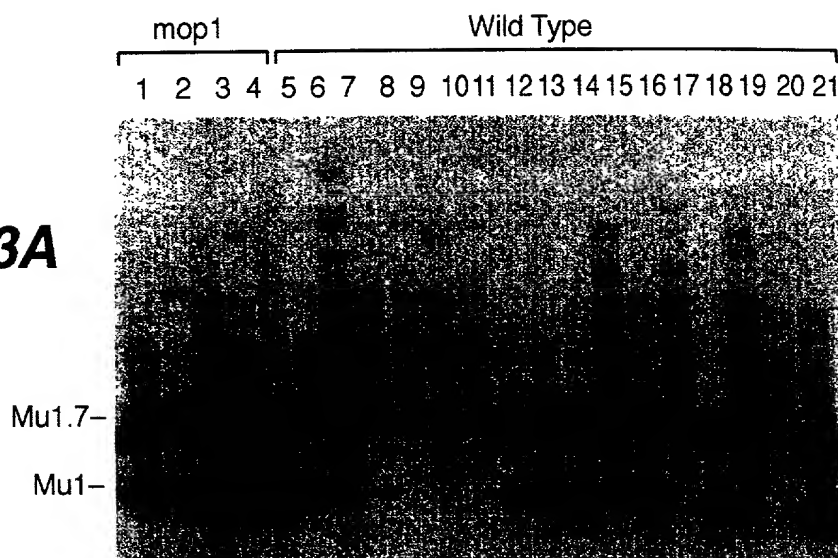
**FIG.\_12A**



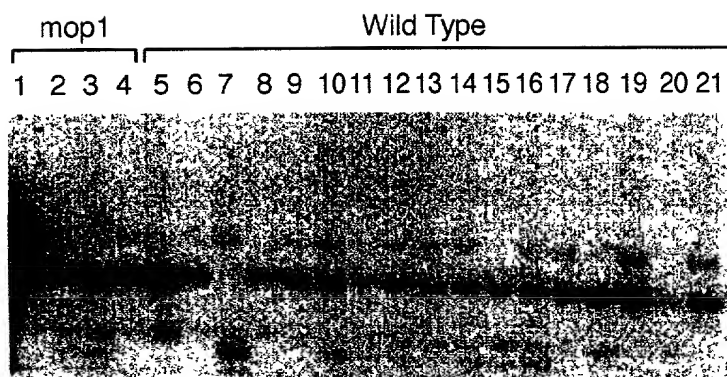
**FIG.\_12B**



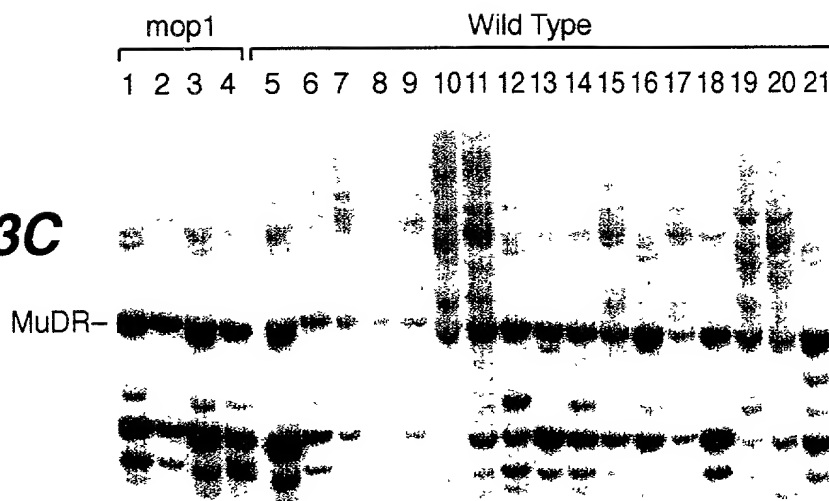
**FIG.\_13A**

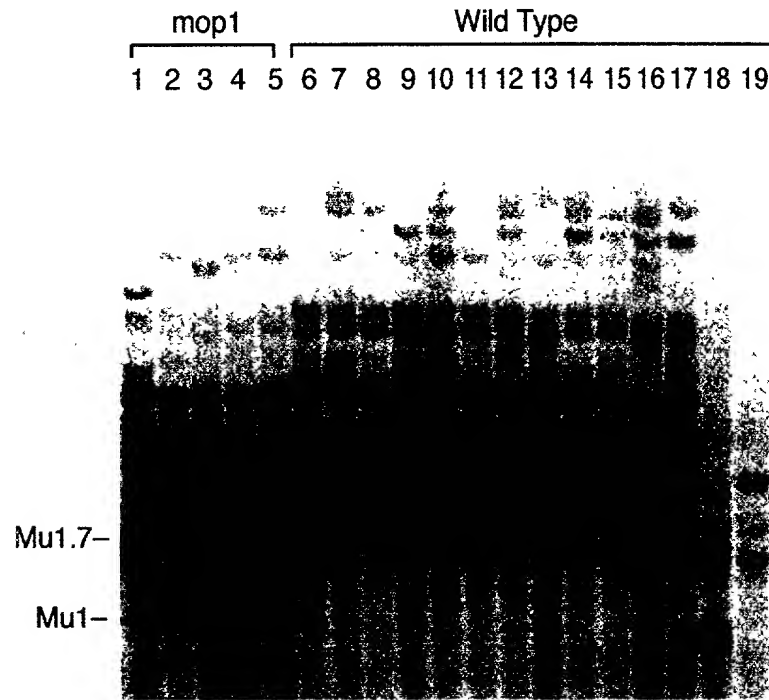


**FIG.\_13B**

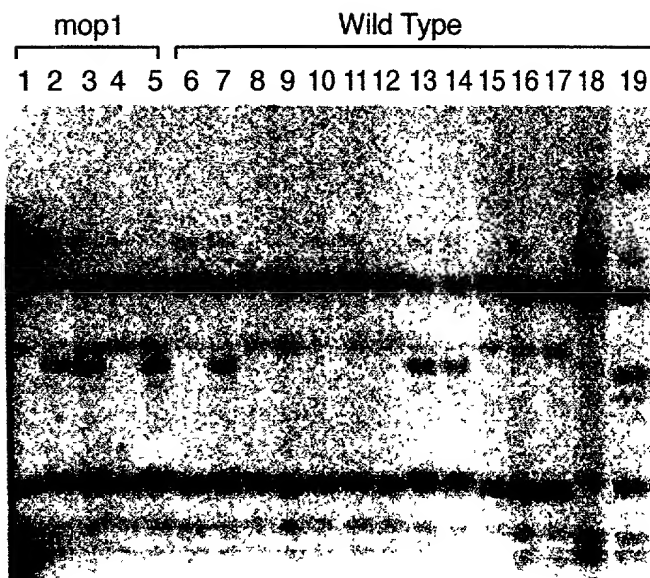


**FIG.\_13C**

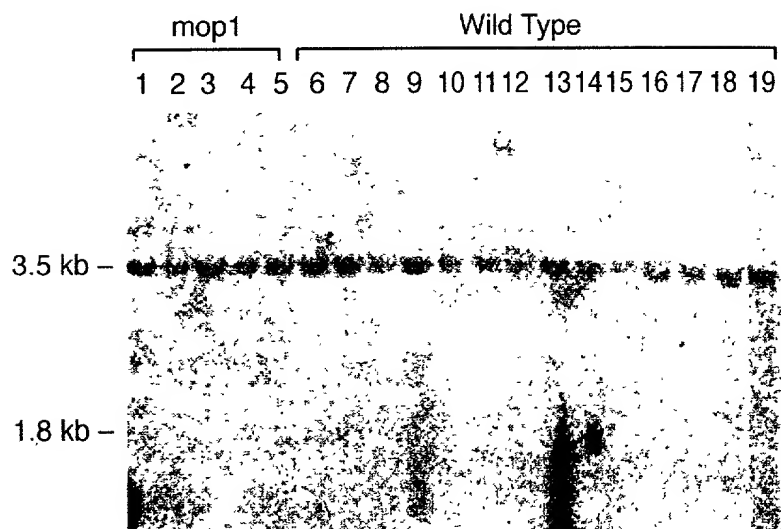




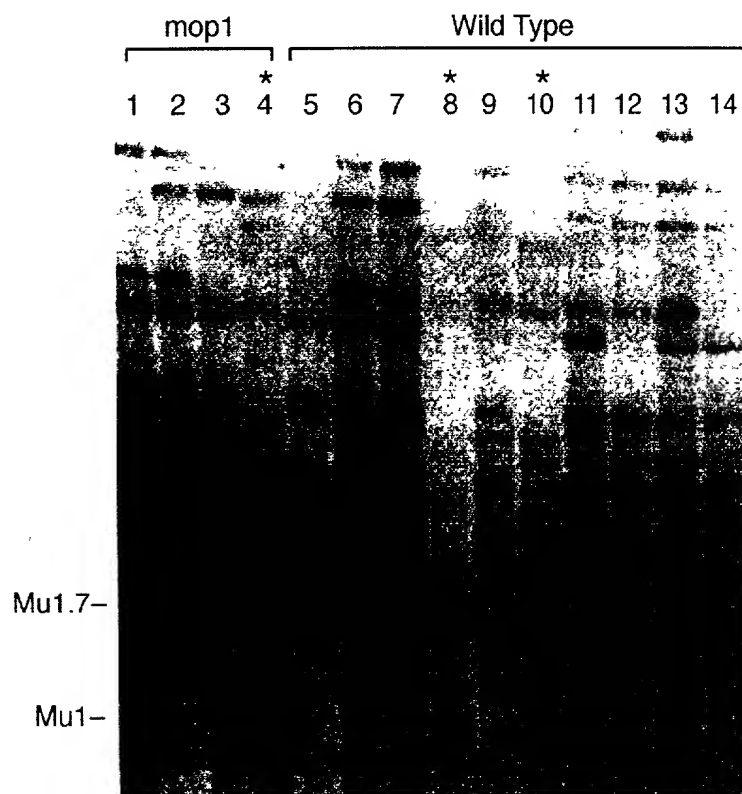
**FIG.\_14A**



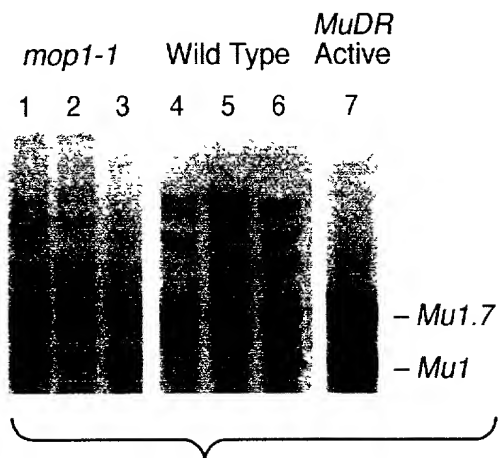
**FIG.\_14B**



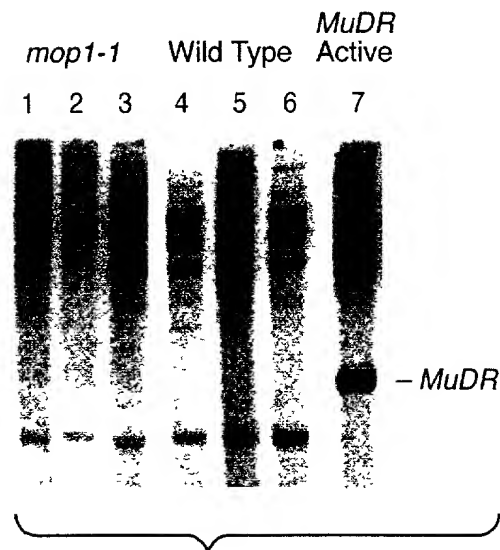
**FIG. 14C**



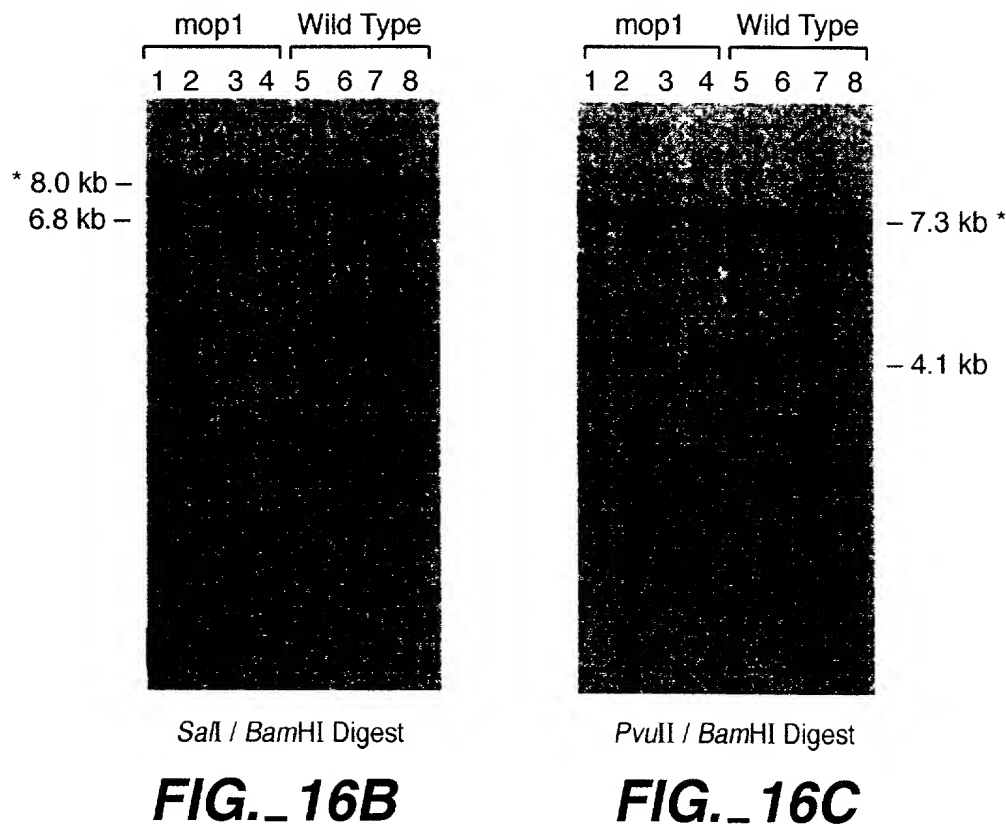
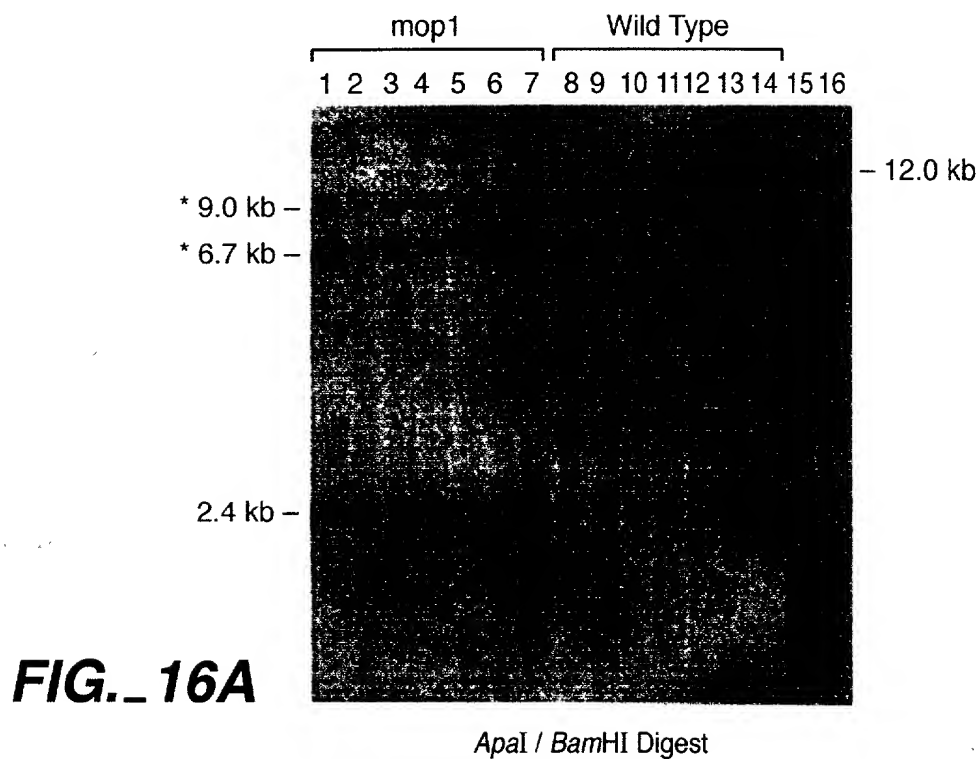
**FIG. 14D**



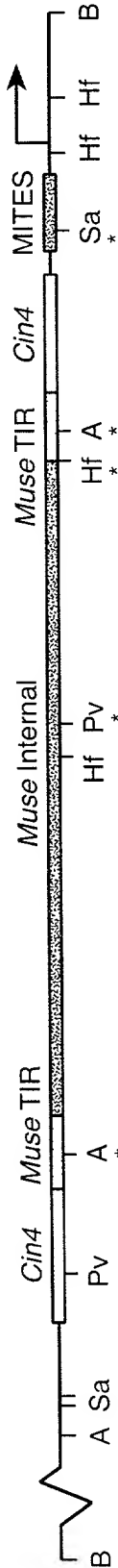
**FIG. 15A**



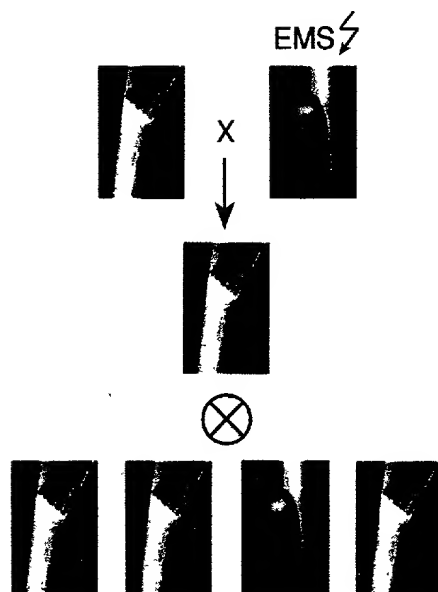
**FIG. 15B**



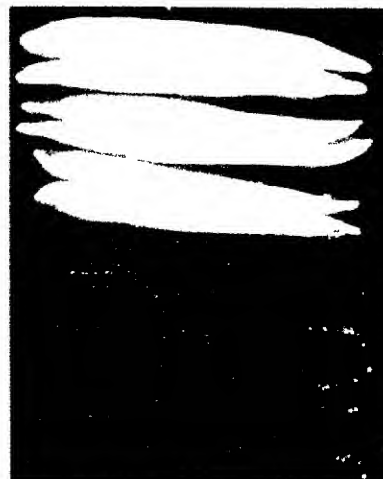




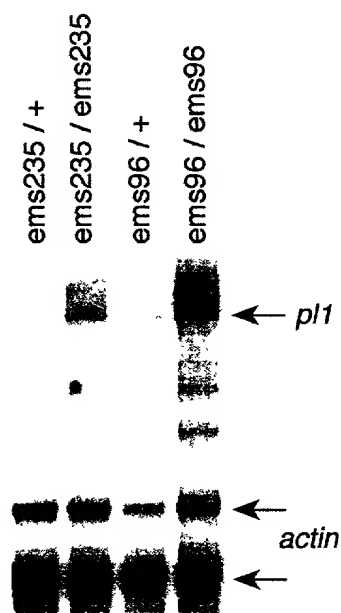
**FIG.\_16D**



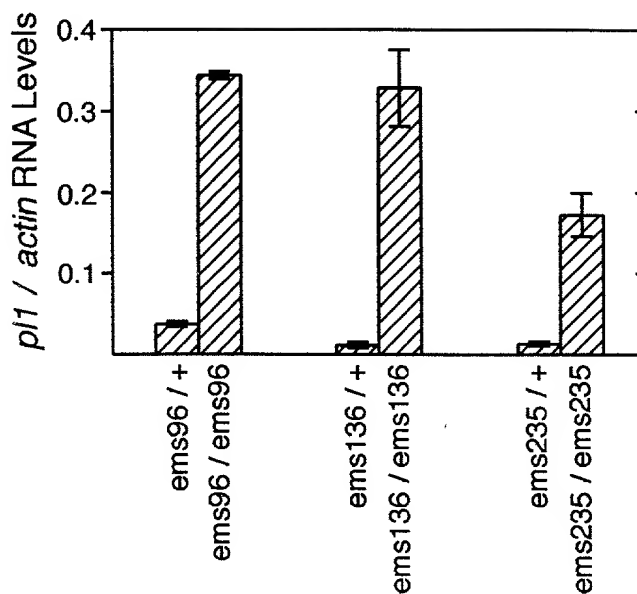
**FIG. 17**



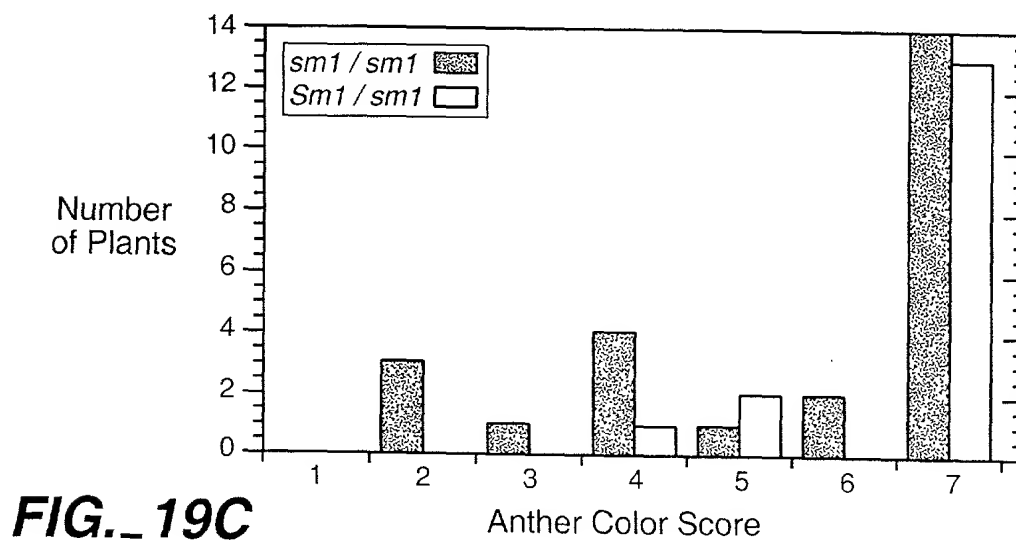
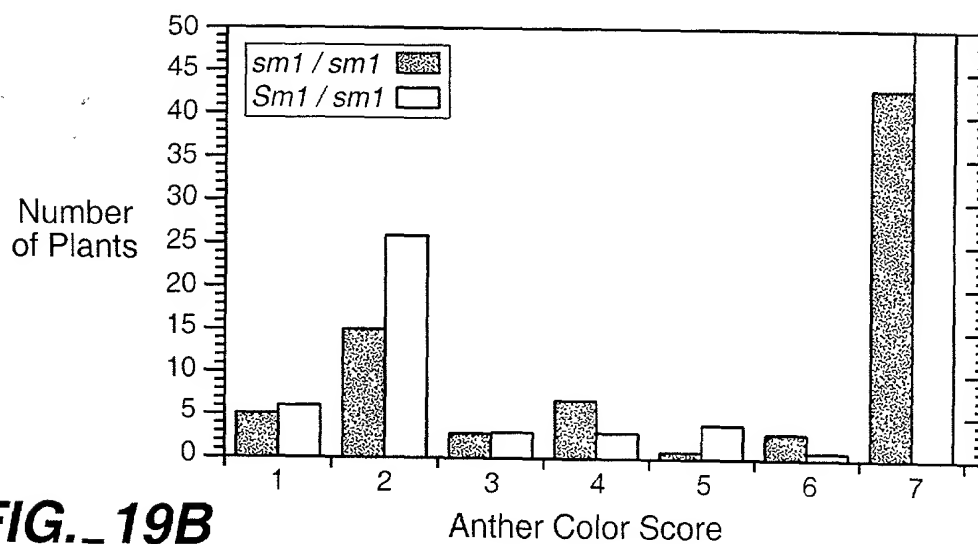
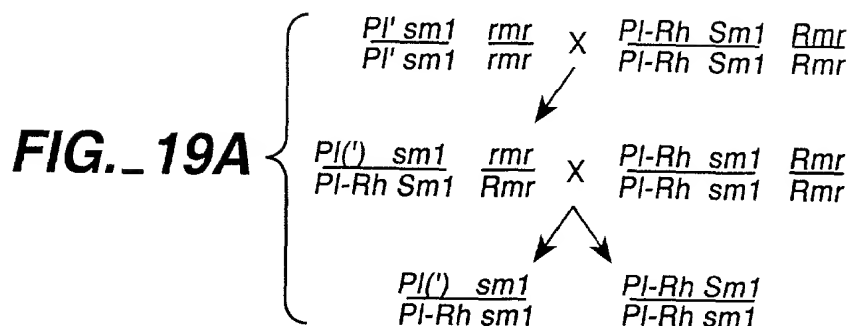
**FIG. 18A**

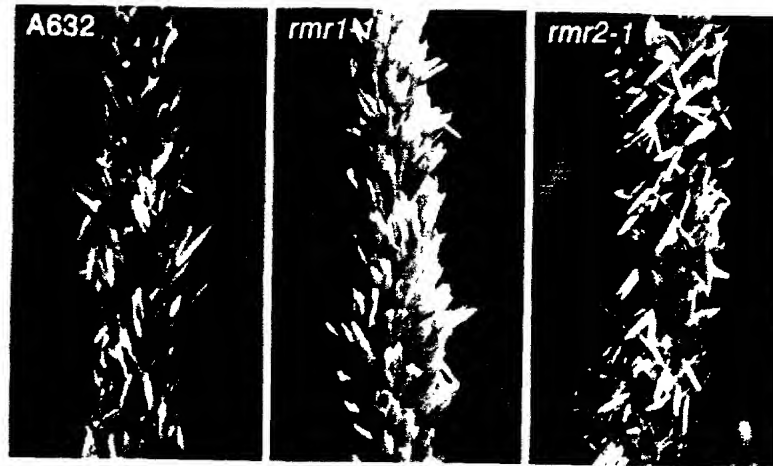


**FIG. 18B**

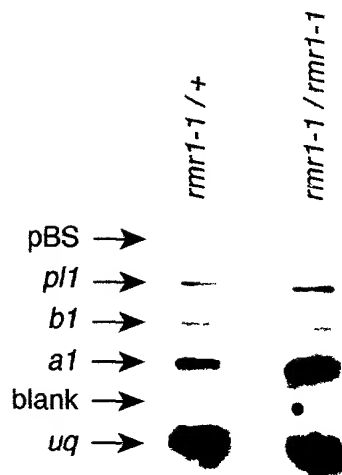


**FIG. 18C**

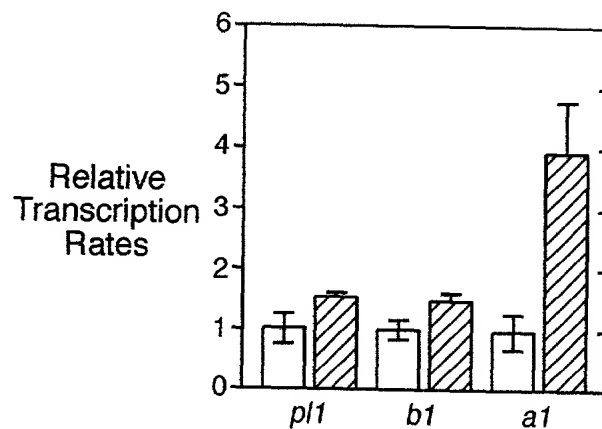




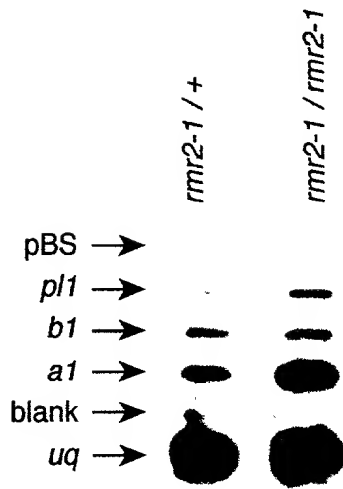
**FIG. 20**



**FIG. 21A**

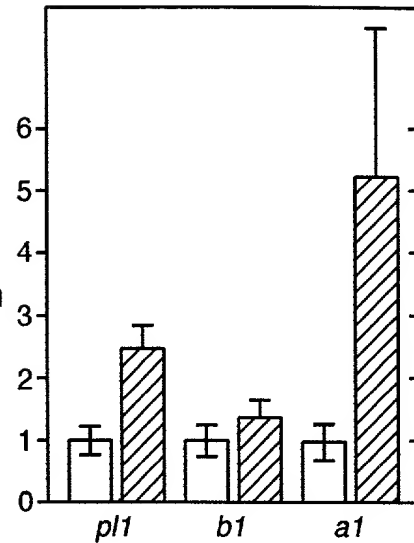


**FIG. 21B**

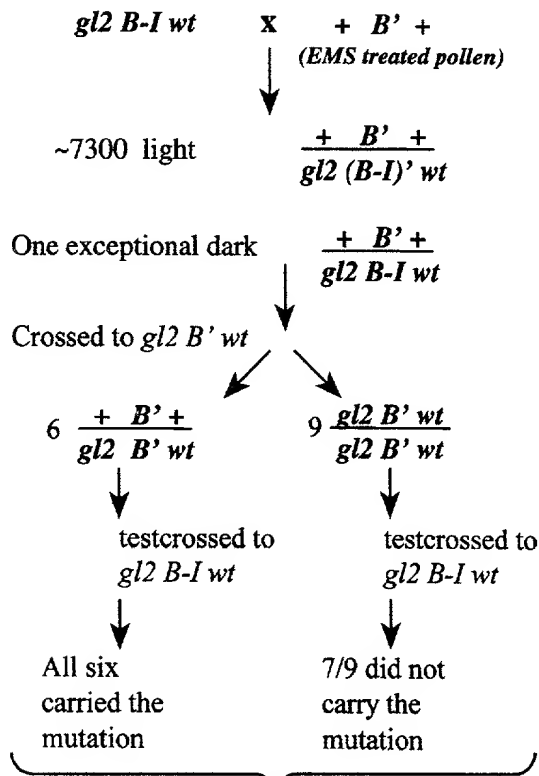


**FIG.\_22A**

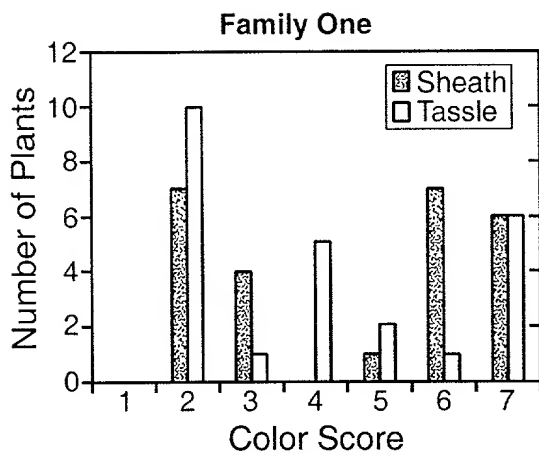
Relative  
Transcription  
Rates



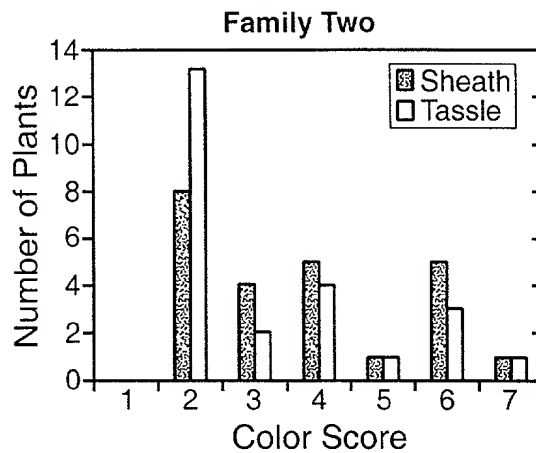
**FIG.\_22B**



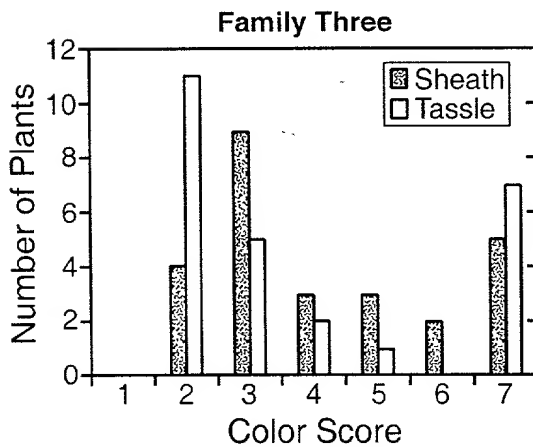
**FIG.\_23**



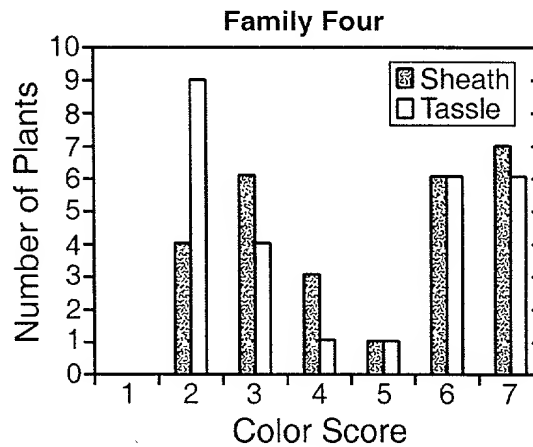
**FIG.\_24A**



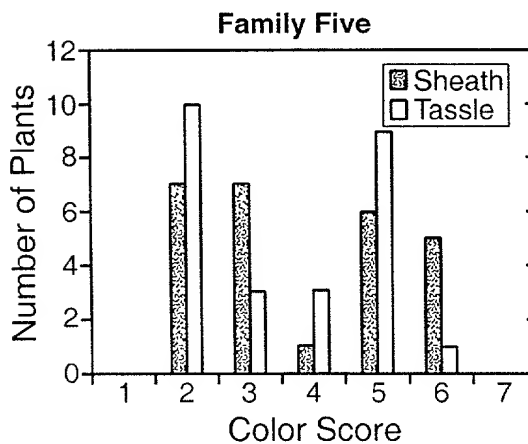
**FIG.\_24B**



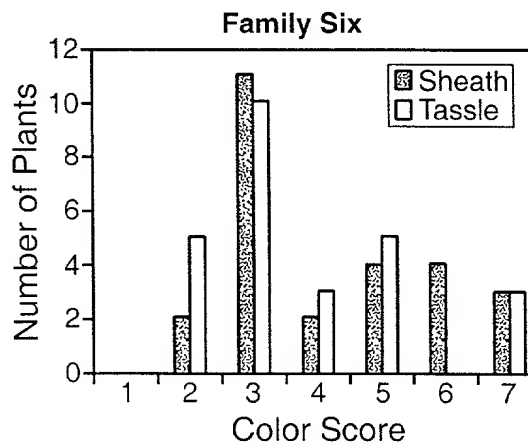
**FIG.\_24C**



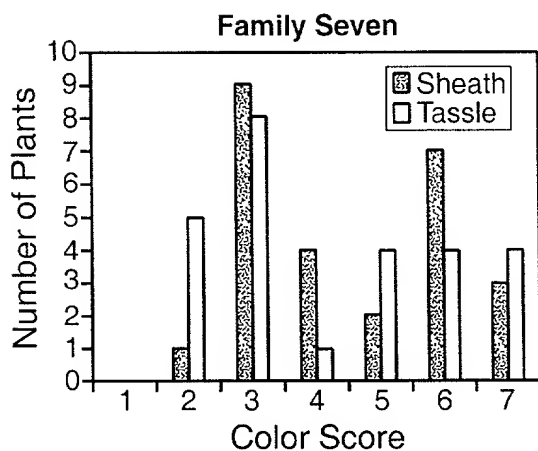
**FIG.\_24D**



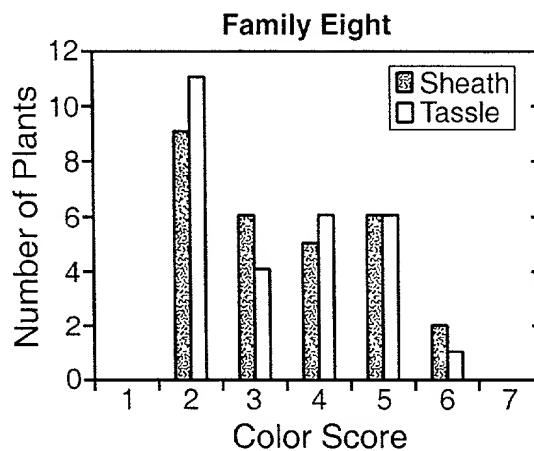
**FIG.\_24E**



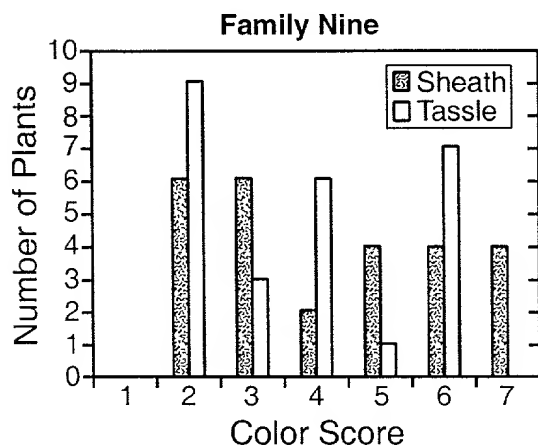
**FIG.\_24F**



**FIG.\_24G**



**FIG.\_24H**



**FIG.\_24I**



FIG. 25B



FIG. 25A



CC2343 Dark

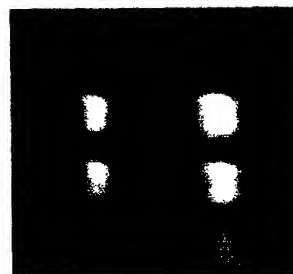
CC2343 Dark

CC2343 Light

CC2343 Light



b1 RNA



EtBr  
Stained  
Gel

FIG.\_26C

mop1-1 / +

mop1-1 / mop1-1

mop3-1 / +

mop3-1 / mop3-1



b1 RNA



EtBr  
Stained  
Gel

FIG.\_26B

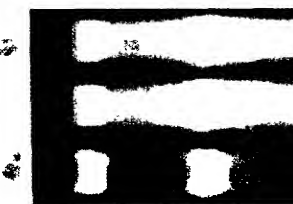
Mop2-1 / Mop2-1

Mop2-1 / Mop2-1

Mop2-1 / +



b1 RNA



EtBr  
Stained  
Gel

FIG.\_26A

**FIG.\_27A**



**FIG.\_27B**



**FIG.\_27C**



**FIG.\_27D**

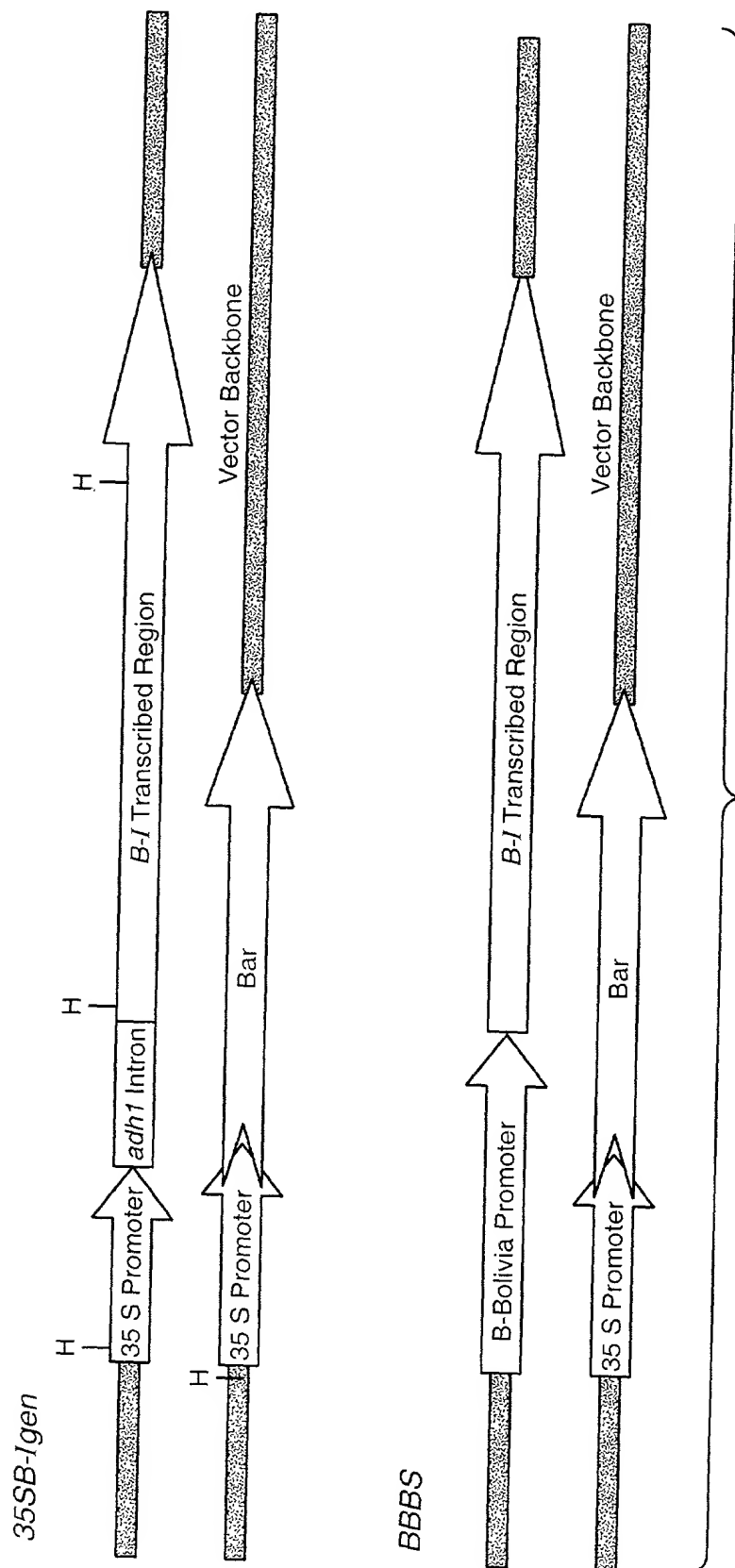


**FIG.\_27E**



**FIG.\_27F**





**FIG. 29A**



*B' Mop2-1 / mop2 B' Mop2-1 / Mop2-1*  
 35SB-I

**FIG. 29B**



*rmr2-1 / rmr2-1 Rmr2 / rmr2-1*  
 35SB-I

**FIG. 29C**



*B' mop1-1 / mop1-1 B' Mop1 / mop1-1*  
 35SB-I

**FIG. 29D**

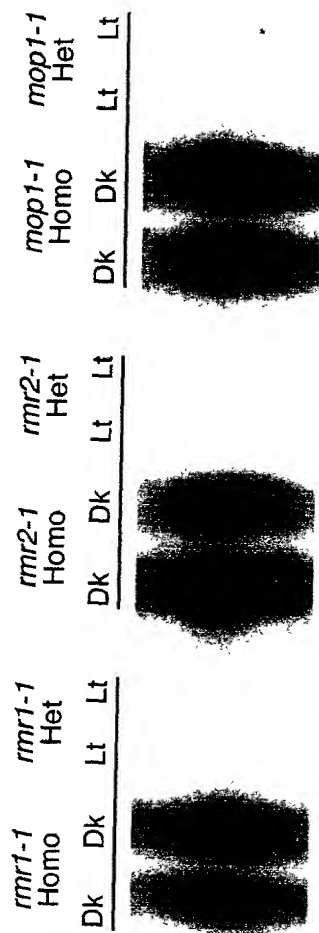


*rmr1-1 / rmr1-1 Rmr1 / rmr1-1*  
 35SB-I

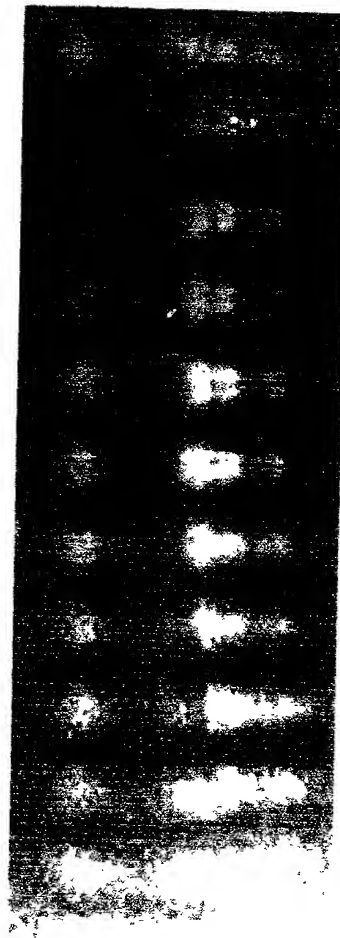


*Rmr2 / rmr2-1 BBBS rmr2-1 / rmr2-1*

**FIG. 29E**



B →



Stained  
Gel

FIG.\_30

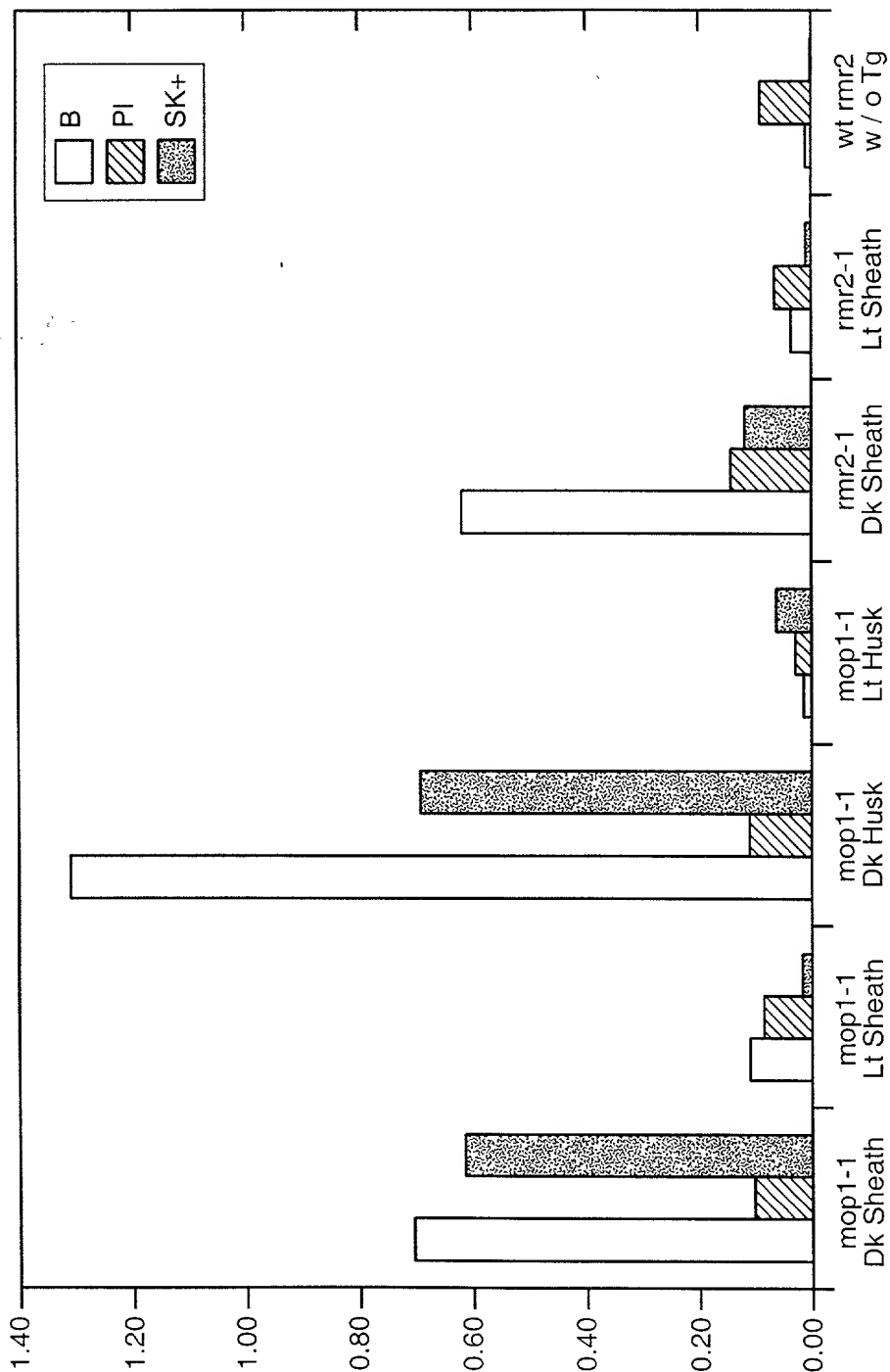
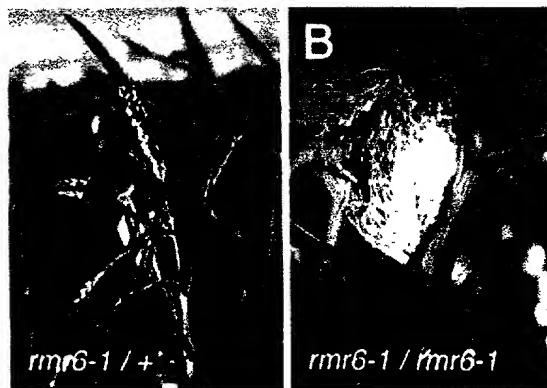
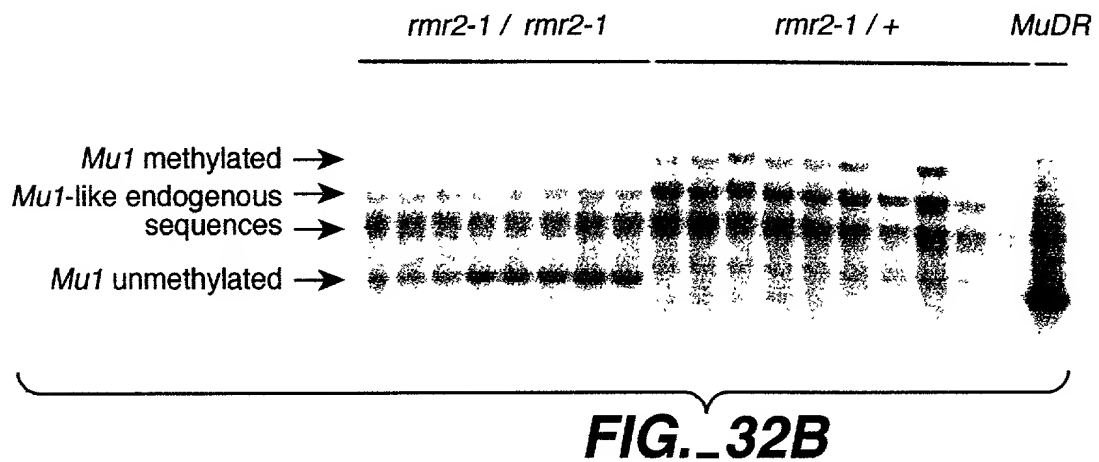
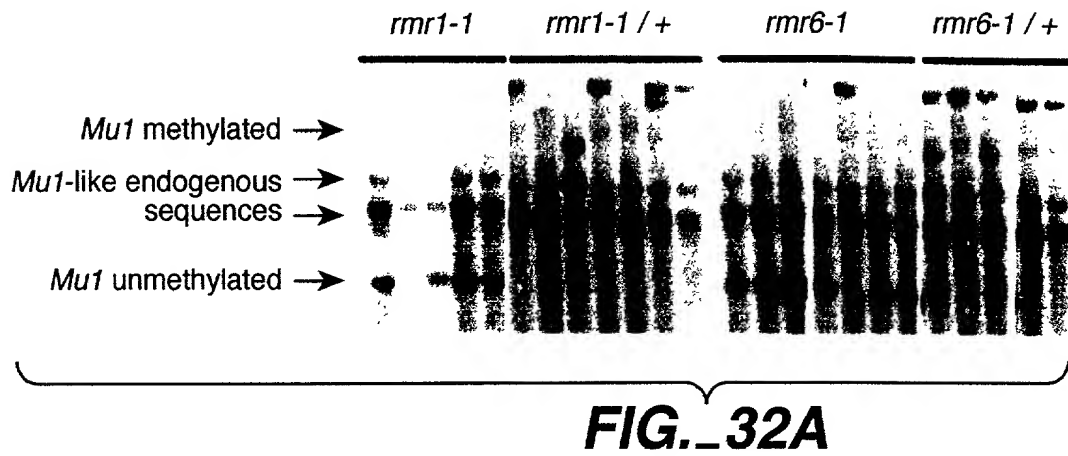
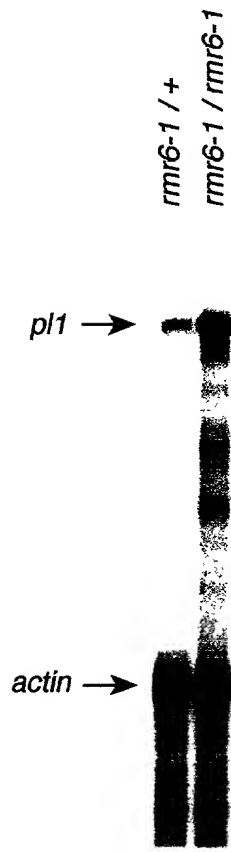


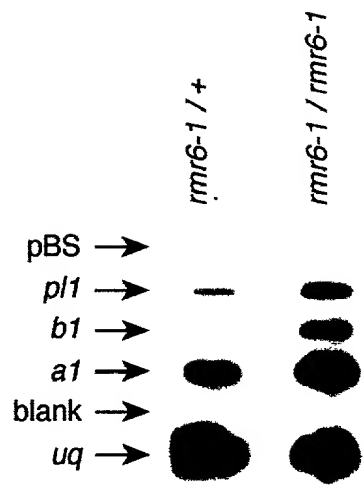
FIG. 31



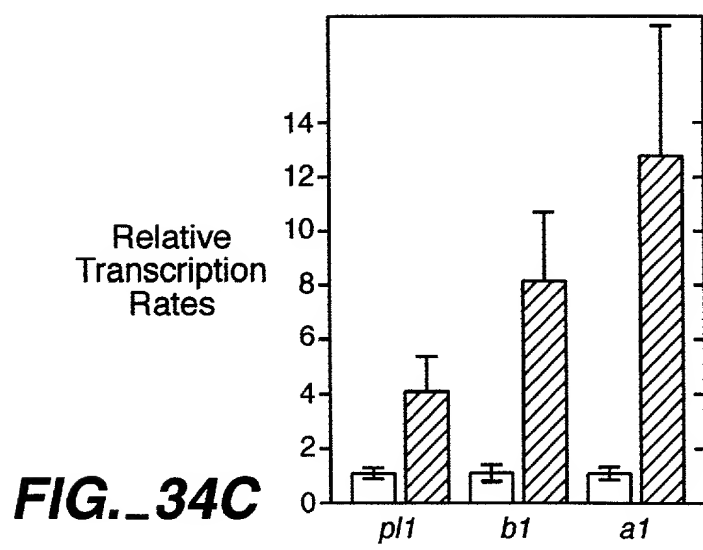
**FIG.\_33A FIG.\_33B**



**FIG.\_34A**



**FIG.\_34B**



**FIG.\_34C**